Service Date: September 7, 1982

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

* * * * *

IN THE MATTER of the Application of the City of Helena to Increase Rates and Charges for Water Service in its Helena, Montana Service Area.	)))))	UTILITY DIVISION DOCKET NO. 82.1.3 ORDER NO. 4927

APPEARANCES

FOR THE APPLICANT:

Jeffrey Sherlock, City Attorney, City of Helena, City-County Offices, Helena, Montana 59604

FOR THE INTERVENORS:

James C. Paine, Montana Consumer Counsel, 34 West 6th Avenue, Helena, Montana 59620

FOR THE COMMISSION:

Opal Winebrenner, Staff Attorney, 1227 11th Avenue, Helena, Montana 59620

BEFORE:

CLYDE JARVIS, Commissioner & Hearing Examiner
GORDON E. BOLLINGER, Chairman
JOHN B. DRISCOLL, Commissioner
HOWARD L. ELLIS, Commissioner
THOMAS J. SCHNEIDER, Commissioner

FINDINGS OF FACT

GENERAL

1. On January 18, 1982, the City of Helena (Applicant or City) filed an application with this Commission for authority to increase rates and charges for water service to its customers in the Helena, Montana area. The Applicant requested an average increase of approximately 96 percent which would result in an annual revenue increase of approximately $1,042,500.

2. Following issuance of proper notice, a public hearing was held on April 28, 29 and 30, 1982 in the City Council Chambers, 316 North Park, Helena, Montana. For the convenience of the consuming public, an evening session was held April 28, 1982 at 7:00 p.m. at the same location.

3. At the public hearing the Applicant presented the testimony and exhibits of:

Russell Ritter, Mayor of the City of Helena
Robert Erickson, City Manager
Thomas Sutberry, City Administrative Officer
Richard Nisbet, City Public Works Director
Charles Dickert, City Water Superintendent
Gene Hufford, Financial Consultant, D.A. Davidson
Norman Gray, City Fire Chief
William Verwolf, City Finance Director
Harold Eagle, Consulting Engineer, Morrison-Maierle, Inc.
Rich Brown, Former May of City of Helena

These witnesses testified relative to: the need to expand plant capacity of the Missouri River Treatment Plant, the need for proposed capital improvements, the estimated cost of plant expansion and proposed capital improvements, the issuance of revenue bonds to finance plant expansion and proposed capital improvements, the need for a continuing main replacement program, water consumption, fire flows, the financial condition of the utility and rate structure.

4. The Montana Consumer Counsel presented the testimony of ten public witnesses at the public hearing:

Leo Walchuk, Vice President for Business Affairs, Carroll College
Matilda Murphy, Helena Resident
Sam Ryan, Helena Resident
Robert VanDerVere, Senior Citizen
Ed Knox, Commercial Property Owner
Ruth Etzwiler, Disabled Retired Nurse
J. Morley Cooper, Helena Property Owners Association
Robert D. Virts, Montana Senior Citizen Association
and Retired Railroaders

Jessie Mola, Low Income Senior Citizens Advocacy Group
Ed McHugh, Helena Property Owners Association

The main concerns expressed by these witnesses were: the magnitude of the proposed rate increase, the expansion of the Missouri River Treatment Plant (MRTP) versus development of deep water wells in the Helena Valley or upgrading the utility facilities on the Ten Mile system, the inordinate amount of lost and unaccounted for water in the system and the implementation of a $.30 surcharge for commercial customers.

CAPITAL IMPROVEMENT PROGRAM

5. In its application, the City has set forth a proposed capital improvement program for the water utility. The proposed construction program is to be funded from a Revenue Bond Issue having a term of 20 years and a maximum interest rate of 13 percent, with the requirements that the City capitalize from the bond proceeds a reserve fund in an amount equal to the average principal and interest payment on the bonds and provide a debt service coverage of 125 percent. .

6. The following table sets out the proposed capital improvements to the water system and the estimated cost of each improvement under consideration in this Docket. Following Table A is a detailed description of each proposed capital improvement.

TABLE A

	Improvement	Estimated Cost
1.	Missouri River Treatment Plant Expansion	$2,888,000
2.	Missouri River Treatment Plant Supply Line 1,439,000	
3.	Chessman Dam Stability Analysis	35,000
4.	Red Mountain Trestle Repair	150,000
5.	Ten Mile Water Supply Relocation	226,000
6.	Ten Mile Raw Water Intake	100,000
7.	Winne Reservoir	220,000
8.	Fire Hydrants	116,000
9.	New 12” Trunk Mains for Fire Flows in Commercial Areas	1,341,000
	Total Construction Costs	$6,515,000

7. Item No. 1 is the proposed Missouri River Treatment Plant (MRTP) Expansion which allows for the renovation of the existing plant and expansion of the facility's maximum daily capacity from the present 6,000,000 gallons per day to 12,000 gallons per day. The City’s rationale for this proposed improvement is that this "will provide a reliable back up system to

meet the needs of the City for the next 20 years, and will provide additional capacity to meet irrigation and/or peak demands" (Exhibit A, Rule VII, Narrative p. 1).

8. Item No. 2 is the proposed MRTP Supply Line improvement which provides for the construction of a 20-inch supply line from the MRTP plant along Custer Avenue to Montana Avenue. The City states "the MRTP supply line is necessitated by the (MRTP) plant expansion" (Exhibit A, Rule VII, Narrative p. 1).

9. Item No. 3 is the proposed Chessman Dam Stability Analysis which will determine if the Chessman Reservoir capacity can be increased by 90 million gallons. The stability analysis "...is necessitated by the current restrictions placed on reservoir capacity by the U.S. Army Corps of Engineers" (Exhibit A, Rule VII, Narrative p. 1).

10. Item No. 4 is the proposed Red Mountain Trestle Repair which will improve the reliability of the flume that diverts water to the Chessman Reservoir. The City states that the flume is in a badly deteriorated state and replacement and repair of the trestle with treated timber will improve the reliability of the flume and guarantee the supply of water from this primary source in the Ten Mile system (Exhibit A, Rule VII, Narrative p. 1).

11. Item No. 5 is the proposed Ten Mile Water Supply Relocation improvement which provides for the construction of a 30-inch main with a 15-million gallon per day capacity to replace the three existing mains from the Ten Mile settling pond. The City's rationale for this improvement is "The Ten Mile supply main relocation is necessitated by the reconstruction of Highway 12" (Exhibit A, Rule VII, Narrative p. 1).

12. Item No. 6 is the proposed Ten Mile Raw Water Intake improvement which provides for the construction of a new raw water intake on the Ten Mile supply system. The City states "The additional Ten Mile Creek raw water intake will allow the system to more fully utilize existing water rights, enhance the Ten Mile supply and establish the ultimate capacity of the proposed Phase II Ten Mile Treatment facility" (Exhibit A, Rule VII, Narrative p. 1).

13. Item No. 7 is the proposed Winne Reservoir improvement to provide for the construction of an additional 500,000 gallon storage tank to serve the southeastern portion of the City. The City's reasoning behind this improvement is "The Winne distribution system has a storage deficiency in that the fire flows are insufficient. An additional half million gallon above ground storage facility will correct that serious deficiency" (Exhibit A, Rule VII, Narrative p. l).

14. Item No. 8 is the proposed fire hydrants improvement to provide for the installation of 58 new hydrants. The City states "The installation of fifty-eight (58) new hydrants will be a cost effective approach to meeting the current city requirement of having hydrants spaced no more than eight hundred (800) feet apart so that no structure would be farther than four hundred (400) feet from a hydrant. This improvement can raise the ISO fire rating for the City,

reduce the citizens insurance premium costs and enhance the fire fighting capabilities of the community" (Exhibit A, Rule VII, Narrative p. 2).

15. Item No. 9 is the proposed new trunk main system improvement to provide better fire flows in commercial areas. The improvement consists of the construction of 23,000 feet of new l2-inch trunk mains along Prospect, Eleventh, Montana, Benton and Custer Avenues. The City indicates this improvement "...will allow for adequate fire flows for the adjacent commercial and industrial properties. These proposed mains will correct deficiencies in the water distribution network, maximize the efficiency of the operation of the system through better looping, provide minimum fire flows and provide for future expansion of the system" (Exhibit A, Rule VII, Narrative p. 2).

16. The City's application has proposed an extensive capital improvement program directed toward correcting existing deficiencies in the system, meeting growing water demands and insuring a reliable source of supply.

The Commission finds that the City has made a clear showing that the last seven proposed capital improvement items listed in Table A of this order are both necessary and in the public interest, and will address those first.

17. The Commission finds that the proposed Red Mountain Trestle repair (Table A, Item No. 4) is a necessary improvement, and shall be granted. The Red Mountain Flume diverts water from the Banner Creek drainage during the spring run off to fill the Chessman Reservoir. The Chessman Reservoir has a storage capacity of 550 million gallons (currently limited to 465 mg.) of water and is utilized to supplement the Ten Mile Creek supply. The City's testimony and exhibits indicate that 40 percent of the Red Mountain flume is supported by untreated timber trestles that the flume is deteriorated in many places resulting in continuous maintenance problems. Replacement and repair of the trestle with treated timber will improve the reliability of the flume which is essential if the City is to continue providing an adequate supply of water.

18. The Commission finds that the proposed Chessman Dam Stability Analysis (Table A, Item No. 3) is necessary due to restrictions placed on the reservoir's storage capacity by the U.S. Army Corps of Engineers. Chessman Reservoir has a storage capacity of 550 million gallons, but the Corps of Engineers has placed a storage limit of 465 million gallons on the reservoir. A downstream flood analysis and a structural investigation of the dam is required before these restrictions can be lifted. This analysis would enable the City to determine if the capacity of the reservoir could be increased and would enhance the City's available water supply if the analysis is positive.

19. At the present time, the Ten Mile water supply relocation (Table A, Item No. 5) appears to be dependent upon the Montana Department of Highways' reconstruction of Highway 12. The City has estimated that its share of the relocation costs will be approximately $226,000

and that the Department of Highways' cost share will be approximately $2,580,000. In conjunction with this relocation, the City will replace the three existing mains supplying the City with one 30" main capable of supplying 15,000,000 gallons daily (prior relocation costs include cost of new line). The Commission finds that the new 30" inch line will aid in lowering the loss of water attributed to this supply line, will benefit the consumer by lowering operation and maintenance costs, and will increase the available supply of water

20. The Commission finds that the construction of a new Ten Mile system raw water intake (Table A, Item No. 6) would allow the City to better utilize its existing 9.0 million gallon per day Ten Mile water right. More efficient utilization of the water right will benefit the consumer through increased available water supply.

21. The testimony of the City witnesses indicated that ~ serious fire flow deficiency exists in the southeastern section of the City. The witnesses placed a high priority on the construction of an additional 500,000 gallon reservoir (Table A, Item No. 7) in the Winne area. The Commission finds that the construction of this additional reservoir will alleviate the serious fire flow inadequacies currently existing in the area to the benefit of consumers.

22. From a fire protection standpoint, the testimony indicates it is desirable to install 58 new fire hydrants (Table A, Item No. 8), so that fire hydrants are spaced no more than 800 feet apart and no structure is farther than 400 feet from a hydrant. There are a number of structures in the City now that are not sufficiently near a fire hydrant to provide adequate fire protection. Although it is not conclusive on the record, it is possible that such additions could raise the ISO fire rating of the City and could, therefore, reduce the fire insurance premiums paid by consumers. The Commission finds that the additional fire hydrants will enhance the fire fighting capabilities of the community, and will allow the improvement.

23. The City's proposal to install 23,000 feet of new 12" trunk mains along Prospect, Eleventh, Montana, Benton and Custer Avenues (Table A, Item No. 9) will allow for adequate fire flows for the adjacent commercial and industrial properties. In addition, these installations will correct deficiencies in the water distribution network, will provide better looping of the system and will provide for future expansion. The Commission finds that this improvement benefits all consumers connected to the water system through an increase of available water for fire flow, domestic use and commercial and industrial use.

24. The City's Missouri River Treatment Plant (MRTP) Expansion proposal created a great deal of controversy and resulted in the Consumer Counsel and the public questioning the City's decision relative to this improvement. It should be pointed out that not all public witnesses participating in this Docket questioned the City's decision, some supported the improvement whole heartedly, but given the questions that were raised the improvement does bear scrutiny.

The need for renovation of the MRTP has been conceded by all parties participating in this docket, as the plant was constructed in 1960, has had no major capital improvements since its construction and is nearing the end of its economic useful life. The only way to insure a continued reliable source of water from this plant, at its present capacity, is through renovation at a cost of $1,055,000.00 (May 7, 1982 Robert Brown letter).

The City's MRTP expansion calls for both the renovation of the existing plant facility, and the expansion of the plant's capacity from its present 6 million gallons per day to 12 million gallons per day.

25. The City's main reason for expanding the MRTP capacity is to insure that the water utility will have sufficient capacity to meet projected future maximum daily demands. The 1978 Morrison-Maierle-Montgomery Master Plan (Master Plan) for the City projected that the maximum daily demand in the year 1980 would be 24 million gallons, and the maximum daily demand in the year 2000 would be 36 million gallons. The following table (City's Exhibit A, Rule XI) represents the actual and projected maximum daily demand during the period 1979 through 1983:

Year	Max. Daily Demand (Million Gallons)
1979	16.7
1980	16.2
1981	16.1
1982 Proj.	16.3
1983 Proj.	16.3

The above table indicates that the Master Plan estimates overstated the 1980 maximum daily demand. The City reassessed its projected maximum daily demand for the year 2000 and adjusted it downward to 28 million gallons.

The City has determined that it is necessary to expand the plant capacity of the MRTP if the City is to have the ability to produce a maximum daily flow of 28 million gallons. While the Commission recognizes that there may exist a need for additional plant in the future, there are many factors that must be considered before the Commission will grant funding for an expanded MRTP.

26. The City of Helena presently has two major sources of supply for its water system; as testified to at the public hearing the MRTP has a 6 million gallon daily capacity and the Ten Mile system has a 10 million gallon daily capacity. The MRTP currently meets the requirements of the Federal Safe Drinking Water Act but the Ten Mile source of supply violates those standards.

The City is under a compliance order from the Montana Department of Health and Environmental Sciences (DHES) to bring the Ten Mile system into compliance with the Act's standards. Given the fact that the Ten Mile system is the City's largest source of water supply, the Commission must consider the effect that the loss of this source would have on the consumers if it is shut down by the DHES for noncompliance with the standards.

27. The present maximum amount of water that can he placed into the City water system from current sources (exclusive of storage) is as follows:

MRTP	6.0 million gallons
Hale System	1.5 million gallons
Ten Mile	10.0 million gallons
Total	17.5 million gallons

28. If the Ten Mile source is lost and the MRTP is expanded to a maximum day capacity of 12 million gallons, the following is the maximum amount of water that can be placed into the system (exclusive of storage):

MRTP	12.0 million gallons
Hale System	1.5 million gallons
Total	13.5 million gallons

29. As can be seen from the above tables, the present sources of supply exceed the near term maximum daily demand of 16.3 million gallons by 1.2 million gallons and loss of the Ten Mile source would result in the maximum daily demand exceeding supply by 2.8 million gallons. If loss of the Ten Mile source were to occur, the City would have to place severe water restrictions on consumers thus resulting in a hardship to the consumer.

30. Stored water is another source to be considered in determining how much water is available to meet maximum daily demand because storage is utilized to meet peak daily demand. The City has the following storage capacity, if the new Winne reservoir is built:

Woolsten	6.2 million gallons
Malben	4.0 million gallons
Hale	2.2 million gallons
Winne	.5 million gallons
Winne II	.5 million gallons
Total Storage Capacity	13.4 million gallons

31. City Witness Public Works Director Nisbet indicated that approximately one-half of the stored water could be used to meet peak demands, reserving the other half for potential emergencies, e.g. fire flow. Using Nisbet's limitation that half of the stored water is available for meeting peak demand, the City would have available another 6.7 million gallons to meet maximum day demand. If the present available maximum daily amount of water of 17.5 million

gallons is added to the available stored water of 6.7 million gallons, then the total available water supply for a maximum day demand would be 24.2 million gallons. This does not indicate to the Commission that the City has proven the current system incapable of meeting current or near term maximum daily demand.

32. Another consideration in determining whether to develop a source of water supply is the results of a cost analysis, i.e. the cost per million gallons to develop each respective source of supply. As stated previously, there are currently two major sources of water supply, the MRTP and the Ten Mile system. A cost analysis of these two sources should be developed and examined to determine which is the most cost effective. Water wells could also be developed as another source of supply, but cost estimates are unavailable that can be utilized to determine the development costs.

33. At the public hearing, City Manager Erickson was cross-examined concerning whether a cost analysis had been performed on the proposed upgrading of the Ten Mile and MRTP sources. Erickson indicated that such data was available, although it was not present at the hearing. The data was submitted by the City as a late-filed exhibit consisting of copies of letters (dated May 7, 1982 and May 11, 1982) from Mr. Robert Brown, a Montgomery engineer, to Mr. Robert Erickson, City Manager.

34. The following table summarizes the Brown cost analysis and also indicates the Commission's modifications to the analysis which are discussed in detail following the table.

WATER TREATMENT PLANT COST ANALYSIS
TEN MILE VS. MISSOURI RIVER
(Asterisks indicate items adjusted by Commission)

	(Source: Brown Letter)		Commission's
Item	Ten Mile	Mo. River	Mo. River
Debt Service	1,266,000	616,000	616,000
Chemicals	259,000	140,000	74,000*
Labor, Supervision, & Administration	95,000	95,000	95,000
Maintenance, Repair, & Replacement	54,000	24,000	24,000
Power	6,000	122,000	64,000*
Misc. Supplies & Service	10,000	10,000	10,000

Cost of Raw Water	2,000	152,000	81,000*
Total Annual Cost	1,692,000	1,159,000	964,000
Cost/Million Gallons	$418/mg	$330/mg	$521/mg

35. The Commission has adjusted Brown's cost analysis for the MRTP because his analysis assumed the City could take 3,510 million gallons per year for the MRTP from the Bureau of Reclamation Regulating Reservoir. The City is, however, limited by contract with the Bureau of Reclamation to a take of not more than 1,850 million gallons in any one water year until the year 2,000 (City's Exhibit K, paragraph 2(a)).

The Commission has adjusted only those expenses which vary with the volume of water as indicated by an asterisk. The adjustment was accomplished by dividing the actual allowable water take by Brown's assumed take and multiplying the developed percentage times the cost indicated in Brown's analysis (1,850 ÷ 3,510 = 52.7%) The exception to this adjustment is the cost of raw water, and that amount was calculated on the basis of the Bureau of Reclamation contract.

36. Brown's analysis included the debt service calculation for the MRTP and the possibility of the City obtaining a take of 3,510 million gallons for the MRTP. Brown has calculated debt service for the MRTP in a manner inconsistent with that used by the City in its case-in-chief for this Docket. If debt service is calculated in a manner consistent with the City's methodology, as presented at the hearing, the debt service would increase to $738,000 annually and thereby increase the cost per million gallons of water to $587.

37. Relative to obtaining more water for the MRTP from the Bureau of Reclamation Regulating Reservoir, it must be noted that the Master Plan at page 5-36 indicates that obtaining additional water may be limited from this source. The Master Plan indicates that to obtain more water from this source, it may be necessary for either other water users to relinquish portions of their contracted allotment or for construction of additional conveyance facilities.

38. Based upon the Brown cost analysis, the apparent limited additional supplies available for the MRTP, the fact that the Ten Mile system is the City's largest source of supply, the DHES compliance order and the fact that the City apparently has the ability to meet present and near term maximum daily demand, the Commission finds that it would not be in the public's benefit to expand the MRTP.

39. The Commission finds that development of and continued utilization of the Ten Mile supply source is more beneficial and in the public interest than expansion of the MTRP.

WATER VOLUMES FOR RATE DESIGN

40. The City used 1,540,000 hundred cubic feet (ccf) of annual water consumption for its revenue projection purposes. This consumption figure represents the water utility's actual consumption during the period from May, 1980 through April, 1981.The City used the May, 1980 through April, 1981 consumption data, instead of fiscal year 1981 consumption data because it was the City's opinion that May and June of 1981 would have lower than normal consumption and not be representative. This was based on the significant impact in these two months of the Spring 1981 Flood, and the resultant water restrictions placed on consumers by the City. The 1,540,000 ccf consumption figure also only includes consumption for Fort Harrison at its domestic use level.

41. In determining its annual consumption data, the City adjusted its projected volumes to reflect the belief that Fort Harrison would be using its own water wells for irrigation rather than City service. Subsequent to the filing of the rate case, the City was informed by Fort Harrison that the Fort would still require city service for irrigation purposes, so there is no reason to believe that the Fort's consumption patterns will change.

42. The City further lowered its 1,540,000 ccf consumption figure for the period May, 1980 through April, 1981 by 5 percent to reflect a reduction in demand due to price elasticity, i.e.,
anticipated customer resistance to the proposed rate increases. This 5 percent reduction would produce a total annual consumption for revenue projection purposes of 1,463,000 ccf.

43. The following table presents the actual billed consumption for the City water utility during fiscal years 1977 through 1981:

Year	Billed Consumption
1977	1,792,039 ccf
1978	1,763,881 ccf
1979	2,066,967 ccf
1980	1,639,802 ccf
1981	1,618,752 ccf

44. The City has requested that the Commission approve consumption for revenue projection purposes at the level of 1,463,000 ccf. The billed consumption table above indicates that in the last five (5) years the City has not experienced such a low consumption level. The pattern of billed consumption (Exhibit A, Rule XI) does not support the City's opinion that the May and June, 1981 consumption was lower than normal consumption and not be representative. The Commission rejects the City’s request that the City be allowed to use consumption data from

the period April, 1980 through May, 1981 for revenue projection purposes, because historical billed consumption data indicates that the consumption during that period is not representative.

45. The utilization of a 5 percent reduction in demand due to price elasticity is rejected by the Commission for two reasons. First, no quantifiable data was submitted by the City to support the contention that a consumption reduction would occur. Second a comparison of the billed consumption data for the period July 1981 through February, 1982 with the billed consumption for the period July, 1980 through February, 1981, during a period subsequent to consumers having experienced an increase in rates, indicates that consumption has increased by approximately 26 percent.

46. The Commission will use an average billed consumption, based on the last three fiscal years, to determine consumption data to be used for revenue projection purposes. By using the three year average, three elements affecting consumption will have been given consideration: 1) temperature and precipitatic fluctuations, 2) price elasticity and 3) any growth realized on the system. The average consumption during the period fiscal year 1979 through fiscal year 1981 is 1,775,000 ccf and is accepted by the Commission for purposes of determining projected revenue.

CUSTOMER COUNT

47. During the public hearing, it was determined that a discrepancy existed between the customer count presented by the City and the customer count used by witness Harold Eagle of Morrison-Maierle. The City's Exhibit A, Rule X, indicates that fiscal year 1981 had a customer count of 8,047, but Eagle's testimony indicates that the customer count is 7,462. The explanation offered during the hearing for resolution of this discrepancy was that the City's customer count included seasonal sprinkling accounts. However, Eagle's testimony indicates that the July and August sprinkling months have the least number of customers.

48. The Commission finds that since the City has billing responsibility, it has probably maintained a more accurate record of customer count than that presented by Eagle. The Commission, therefore, accepts the City's customer count of 8,047.

OPERATING EXPENSES

49. The City proposed total operating expenses for fiscal year 1983 of $1,218,869, which included a $200,000 annual allowance for main replacements (recurring annual capital improvements. The operating expenses proposed by the City were not challenged by any party participating in this hearing and are accepted by the Commission.

INTEREST COMPUTATION

50. The City has assumed an 11 percent interest rate on its bond reserve computation and on interest earned on the bond proceeds. The Montana Consumer Counsel advocates that the Commission should assume an interest rate of 13 percent for both computations since the City at the time of the hearing was realizing earned interest at the rate of 14.5 percent on short-term investments and 12.5 to 13 percent on 60 to 90 day investments. In consideration of the uncertainty of interest rates, the Commission finds that the City's conservative interest rate of 11 percent is reasonable.

CAPITAL REFINANCING

51. In its proposed bond issue, the City has included $150,000 for capital refinancing which the City defined as long-term financing of capital expenditures that have been financed in the short-term through registered warrants. The registering of warrants indicates that the water utility has not generated sufficient revenues to meet its obligations and has, therefore, incurred a deficit.

52. The Commission denies the City's request to include capital refinancing in its proposed bond issue based on the Montana Supreme Court ruling in City of Helena and City of Billings v. Montana Department of Public Service Regulation, ___ Mont.,__ P.2d __, 38 St. Rptr. 1560 (1981).

PROPOSED BOND ISSUE

53. The Commission finds that the following components of the proposed "Series 'F' Bond Issue" are appropriate, and the Commission will grant the City sufficient revenues to cover these expenditures:

Construction Costs	$3,243,000
Issue Costs	unknown
Series "E" Defeasance	697,500
MBIA Insurance	unknown
Reserve Requirement	unknown
Series "E" Closeout	(97,000)
Community Development Transfer	(58,000)
Interest on Bond Proceeds	unknown

The expenditure amounts designated "unknown" in the Table are amounts whose calculations are contingent upon other items contained in the bond issue. The Commission cannot make these calculations without additional information. The City at the time it issues the Series "F" bonds

shall submit a schedule to the Commission reflecting all bond costs as outlined in the above Table.

RATE DESIGN

54. The City's application proposed increased rates for all customer classifications except fire hydrant rentals. The Commission notes that since several of the proposed capital improvements are associated with the water utility providing improved fire protection, it is appropriate that an increased assessment be made against the fire hydrant rental to reflect the increased expense.

55. The City's application also proposed that commercial customers pay a $.30 per ccf surcharge to finance improvements to the distribution system. The City's rationale for implementing a commercial surcharge was that commercial customers were receiving the majority of the benefit, through increased fire flows with the construction of the new 12 inch mains. Public witness testimony in opposition to the proposed surcharge argued persuasively that water consumption had little to do with the need for fire protection.

The Commission rejects the City's request for a commercial surcharge finding that the need for fire protection is not related to the amount of water consumed by the utility's commercial customers, and that the City's own testimony indicated that the proposed distribution system improvements will benefit all customer classes. (City's Exhibit A, Rule VII, p. 2, Paragraph 2.)

56. The City did not present a fully allocated cost of service study in its application, and absent such study, the Commission cannot determine what the level of revenue contribution should be from each customer classification. The Commission finds, therefore, that the City should increase all rates and charges on a uniform percentage basis to attain the approved revenue.

57. The Montana Consumer Counsel recommended in its proposed order that the City should be directed to perform a cost of service study to determine the cost of providing water service to the various customer classifications. The Consumer Counsel's proposal is well taken, and the Commission would recommend that the City undertake such a study prior to the filing of its next rate case before this Commission.

MISCELLANEOUS

58. The Commission received testimony at the hearing concerning the City's water rights, and why they are an important factor to be considered in determining where development should be of additional water supply sources. The City's water rights include first and second water rights on the Ten Mile Creek drainage for a 9 million gallon per day take. Possessing the

first and second water rights on the Ten Mile virtually assures the City of a continued allowable take from this drainage of 9 million gallons per day following its water rights adjudication. The City obtains the water it receives from the Missouri River System by contract with the Bureau of Reclamation. The contract assures the City only that it will have a take from this source at a maximum level of 1,850 million gallons annually through the year 2000.

59. The Commission also received testimony concerning the possible development of water wells as a source of water supply for the City. There were no conclusive studies available from the City regarding the cost of developing wells as a supply source or the possible effects that the development of a municipal ground water supply would have on the aquifer. The City's consulting engineers have indicated that further evaluation of the groundwater potential should be pursued. The Commission would concur with the engineers and encourages the City to make such an evaluation so that a determination can be made relative to feasibility of developing this source of supply.

60. The City admitted at the hearing that the water utility is experiencing inordinately high amounts of lost and unaccounted for water on the system. This lost and unaccounted for water contributes to the City's maximum day demand and any capital improvements to the transmission and distribution system should result in both reduced amounts of lost and unaccounted for water and the availability of more water to meet peak daily demands. The City also indicated that it believed that the largest contributing factor to the water loss was the Ten Mile Transmission Line which will be remedied with the construction of the new 30 inch transmission line.

CONCLUSIONS OF LAW

1. The Montana Public Service Commission properly exercises jurisdiction over the parties and subject matter in this proceeding. Title 69, Chapters 3 and 7, MCA.

2. The Commission afforded all interested parties notice of and an opportunity to participate in this proceeding. Section 69-3-303, MCA.

3. The Commission denies the City's request to include capital refinancing in its proposed bond issue based on the Montana Supreme Court ruling in City of Helena and City of Billings v. Montana Department of Public Service Regulation, ____Mont.__, P.2d__ , 38 St. Rptr. 1560 (1981).

4. The rates approved herein are reasonable and just. Title 69, Chapter 3, MCA.

ORDER

NOW THEREFORE IT IS ORDERED by the Commission that the City of Helena shall file tariffs consistent with the Findings of Fact for Docket No. 82.1.3 contained herein.

IT IS FURTHER ORDERED that the City of Helena is authorized to implement increased rates in a two-step procedure. Step one of the increase shall recognize the increased costs of operation and maintenance as indicated in Finding of Fact Number 49, and shall become effective immediately upon Commission approval. Step two of the rate increase shall recognize the costs associated with the Series "F" water revenue bonds as indicated in Finding of Fact Number 53, and shall become effective upon Commission approval subsequent to the issuance of the Series "F" bonds.

IT IS FURTHER ORDERED that the rates approved herein shall not become effective until the tariffs and the necessary calculations for the bond issue costs have been submitted for approval by the Commission.

IT IS FURTHER ORDERED that a full, true and correct copy of this order be sent forthwith by first class United States mail to the Applicant and all other appearances herein.

DONE IN OPEN SESSION this 7th day of September, 1982 by a vote of 5 - 0.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMISSION.

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GORDON E. BOLLINGER, Chairman

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JOHN B. DRISCOLL, Commissioner

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HOWARD L. ELLIS, Commissioner

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CLYDE JARVIS, Commissioner

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THOMAS J. SCHNEIDER, Commissioner

ATTEST:

Madeline L. Cottrill
Secretary

(SEAL)

NOTE: You may be entitled to judicial review of the final decision in this matter. If no Motion for Reconsideration is filed, judicial review may be obtained by filing a petition for review within thirty (30) days from the service of this order. If a Motion for Reconsideration is filed, a Commission order is final for purpose of appeal upon the entry of a ruling on that motion, or upon the passage of ten (10) days following the filing of that motion. cf. the Montana Administrative Procedure Act, esp. Sec. 2-4-702, MCA; and Commission Rules of Practice and Procedure, esp. 38.2.4806, ARM.